

REMARKS

In the outstanding Office Action, Claims 39-49 and 87-107 were withdrawn from consideration as drawn to non-elected inventions. The non-elected claims have been canceled.

The drawings were objected to, specifically, the dimensions in **Figures 5A-5C** were objected to and the use of "D" when not indicating diameter. Corrected drawings have been filed under separate cover; support for the drawings is in the specification as filed at pages 16 and 19. The Examiner also requested a table relating to the various claimed elements to the variables listed on **Figure 4** for purposes of clarification. As these remarks are understood, a response follows in Table 1 below.

Table 1: Correlation of Claims with **Figures 3 and 4**

| Claim Element | Figure 4 Element Label |
|--------------------------------|-------------------------------|
| Bottom | 12 |
| Sidewall | 14 |
| Flange | 16 |
| Height | Y5 |
| Flange width to Diameter Ratio | X4-X2/2X4 |

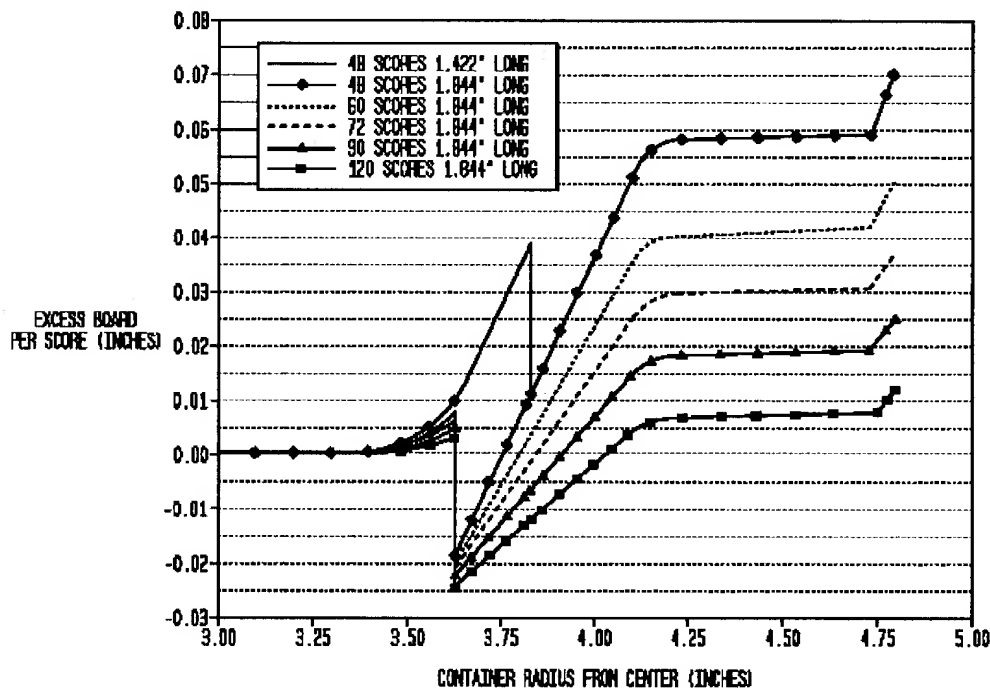
Should the Examiner require further clarification, please call undersigned Counsel at 703-968-8600. *Note* that excess paperboard per score calculations appear at pp. 21-23 of the specification as filed; further discussed herein.

With respect to the Examiner's comments as to the form PTO-1449 and references supplied, Counsel has reviewed the other references and believes them merely cumulative. These references will nevertheless be supplied under separate cover with the required fee so that the Examiner can reach his own conclusion.

The Examiner objected to Claims 12-16, 25, 67-68 and 80-84 under 35 USC §112, second paragraph, because the excess paperboard per score at the flange was not clear from the variables in **Figure 4**. The excess paperboard per score in inches is not apparent from **Figure 4**, rather the calculation appears on pages 22-23 and thereafter in Tables 4-6 where it

is explained that the excess paperboard per score about the flange are the outer horizontal portions of the curves of **Figure 11** at a product radius of from about 4.2 to about 4.75 inches as are seen in **Figure 11**:

FIG. 11



As illustrated and explained, the claim terminology is believed exceedingly clear. If needed, further explanation appears at page 28, Table 6. Excess paperboard per score is equal to the total Board Takeup less the product of the number rules times their width divided by that product. The claims reciting certain excess paperboard per score values are believed most clearly patentable since the references do not remotely suggest the claimed combination of product attributes.

Claims 1-38 and 50-86 were rejected over art. Claims 1, 4, 5, 6-9, 17, 19-20, 50-52, 54-60 and 69 were rejected under 35 USC §102(b) as anticipated by United States Patent No. 4,721,499 of *Marx et al.* The remaining claims were rejected on the basis of obviousness only over *Marx et al.* '499 alone or over *Marx et al.* '499 in further view of United States

Patent No. 5,938,112 of *Sandstrom*. *Marx et al.* '499 and *Sandstrom* '112 were previously submitted by the Applicant.

Any overlap with *Marx et al.* '499 was inadvertent and in any event has been remedied by way of the foregoing amendments. As amended, the claims are believed allowable.

Support for the amendments to the specification are believed self-evident. On page 13, perimeter **D** has been changed to perimeter **P** for clarity. On page 15, Table 1, row 2 is corrected. Obviously, the X2 as a typographical error since X2 appears in row 4 and the ratios listed are consistent with **Figure 4**.

Support for amendments to the claims appears in Table 8 (page 32), the row at 0.5 inch deflection as well as the column headings for 60 scores, 72 scores and 90 scores. *Note also* the SSI Rigidity test described at page 29, line 20 and following. The 60-90 score limitation for the paperboard blank is also found in original Claims 8 and 28.

The amended independent claims all recite an SSI rigidity of at least 500 grams at 0.5" deflection, that the paperboard blank from which the container is made has 60-90 scores or both features. The advantages of the claimed container are seen in Table 8, Examples 9, 10, 11 reproduced below:

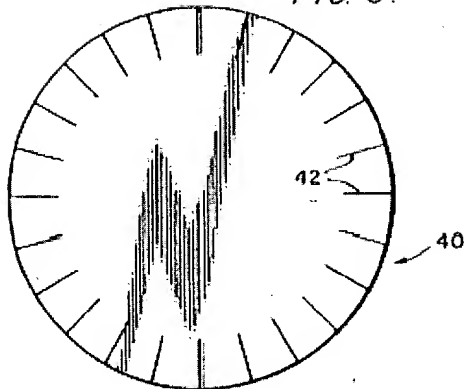
Table 8 – Instron Rigidity

| Example | 7 | 8 | 9 | 10 | 11 | 12 |
|------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| # Scores in Paperboard Blank | 48 | 48 | 60 | 72 | 90 | 120 |
| Score Length | 1.422" | 1.844" | 1.844" | 1.844" | 1.844" | 1.844" |
| | | | | | | |
| Deflection (Inches) | Load GM (grams) | Load GM (grams) | Load GM (grams) | Load GM (grams) | Load GM (grams) | Load GM (grams) |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0.1 | 142 | 126 | 123 | 163 | 138 | 105 |
| 0.2 | 295 | 265 | 251 | 326 | 289 | 229 |
| 0.3 | 429 | 404 | 381 | 456 | 423 | 341 |
| 0.4 | 527 | 517 | 488 | 541 | 517 | 428 |
| 0.5 | 596 | 597 | 569 | 597 | 580 | 496 |
| 0.6 | 640 | 651 | 625 | 630 | 621 | 545 |
| 0.7 | 666 | 685 | 661 | 652 | 647 | 582 |
| 0.8 | 670 | 706 | 684 | 664 | 663 | 604 |
| 0.9 | 679 | 714 | 696 | 668 | 668 | 621 |
| 1 | 670 | 722 | 701 | 657 | 662 | 624 |

It is seen in Table 8 that the container made from the 120 score blank was of much lower strength, while it is seen in Table 7, p.31 of the application as filed that when made from blanks with 48 scores, product variance as evidenced by standard deviation in rigidity is seen. Thus, 60-90 scores is unexpectedly superior, especially in view of the high rigidity of the products.

The references are not believed to remotely suggest the claimed invention, for example, *Marx et al.* '499 claims at most an SSI Rigidity of "140" to "280" grams at 0.5 inches; Col. 10, line 35. Note also **Figure 3** of *Marx et al.* '499 wherein 24 score lines are shown:

FIG. 3.



The high rigidities of the invention are not remotely suggested nor are the use of blanks with 60-90 scores. All claims as they now appear are believed allowable.

Respectfully submitted,

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February 26 2004